Predicting the Content of Facebook Status Updates with an Extended Theory of Planned Behaviour

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Statement of Sources

I declare that this report is my own work and that the contributions of others have been duly acknowledged.

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Emma Brown Date

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Abstract

The exchange of socioemotional information on the social networking site Facebook is often facilitated through status updates: short messages posted on the user's wall. This study investigated Facebook users' intentions to post positively or negatively valenced content in their status updates (Time 1, *N*= 154), and in turn to examine the relationship between Time 1 intentions and subsequent posting behaviour (Time 2, *n*= 39). An extended Theory of Planned Behaviour (TPB) approach was taken, with extraversion, neuroticism, self-esteem and need to belong included additional to attitude, subjective norm, and perceived behavioural control. Facebook intensity and social desirability were included as control variables. The final models significantly predicted intentions to post both positively and negatively valenced content in status updates. Positive status update intention was significantly predicted by less social desirability, more favourable subjective norms, greater perceived behavioural control, and a positive stimulation belonging orientation. For negative status updates, only attitudes and subjective norms were significant individual predictors. There was a strong relationship between intention to post negatively valenced content and actual negatively valenced content, but no relationship between intention and actual positive valenced status updates. It is concluded that social norms play a key role in status updates, showing a positivity bias on Facebook.

Facebook is the most utilised social networking site, supporting 1.32 billion daily active users worldwide (Facebook Newsroom, 2017). The Facebook platform encourages social connection through 'status updates', short messages which express the Facebook user's current thoughts, feelings and emotions (Winter, 2014). The aim of the current research was to explore the mechanisms that underpin the posting of positively and negatively valenced content in Facebook status updates through the theoretical framework of Ajzen's Theory of Planned Behaviour (Ajzen, 1991). The TPB has been employed to identify important predictors of internet related behaviours in past research (Baker & White, 2010), however it has not yet been used to predict users' intentions to post posively or negatively valenced content in Facebook status updates. Extension variables (extraversion, neuroticism, self-esteem and need to belong) were added to the TPB model to increase its predictive ability. In addition, the current study measured posting behaviours by viewing participants' *actual* Facebook status updates.

Status Updates on Facebook

A prominent Facebook feature that facilitates social connection through the exchange of socioemotional information is the posting of status updates; short messages consisting of text or images which express the users' current thoughts, experiences and emotions (Carr, Schrock, & Dauterman, 2012; Winter, 2014). Status updates are unique from other forms of online communication in that they are aimed at a semi-public, personally relevant audience; the user's curated friend-network (Carr et al., 2012). When a Facebook user posts a new status update, it appears on the users "wall" (their personal profile) and in the "newsfeed" (a continuously updated stream of content from people and Pages in the user's network) of their friends. Friends, in the Facebook context, may refer to one's closest confidants to

acquaintances, co-workers, or even strangers and celebrities. Subsequently, social contexts that would remain separate in the face-to-face world are collapsed on Facebook (Utz, 2015)

Posting frequent status updates benefits Facebook users by facilitating social connection with others (Verduyn, Ybarra, Résibois, Jonides, & Kross, 2017). The benefits and resources obtained from one's social relationships are referred to as "social capital" (Putnam, 1995). Social capital is often considered as comprising two subtypes: bridging and bonding (N. B. Ellison, Vitak, Gray, & Lampe, 2014). Bridging social capital refers to socially heterogeneous links and is mainly provided through acquaintances or "weak ties". Bonding social capital is provided by close relationships or "strong ties" and is characterised by increased levels of social support, trust, and companionship (N. B. Ellison et al., 2014). Social support derived from Facebook is associated with subjective well-being (Indian & Grieve, 2014; Verduyn et al., 2017). For example, J. Kim and Lee (2011) found that when participants shared honest personal information about themselves on Facebook, they perceived greater social support from their friend-network and experienced an increase in subjective wellbeing as a result.

Status updates facilitate social connection with others through self-disclosures (Utz, 2015). Self-disclosure involves revealing personal information about oneself such as attitudes, preferences, experiences and emotions (Winter, 2014). According to social penetration theory (Altman & Taylor, 1973), self-disclosure is vital for building and maintaining intimate relationships. As a relationship develops, the intimacy of the self-disclosures increase (Utz, 2015). Facebook users benefit from revealing intimate information online because intimacy

elicits forms of bonding social capital such as social and emotional support (Huang, 2016).

Intimate self-disclosures can be negatively or positively valenced. Shen, Brdiczka, and Liu (2015) found that participants who disclosed more negative and personal experiences in status updates, as identified through the use of more negative and subjective language, had greater success in soliciting social support and empathy from their friend-network than those who refrained from negative self-disclosures. In contrast, Blight, Jagiello, and Ruppel (2015) conducted a study to examine the features of support-seeking status updates on Facebook. Participants provided the researchers with a copy of their status updates and the most supportive comment each status received. Results showed that positively valenced status updates were associated with the greatest perceived social support (Blight et al., 2015). The greater number of positive status updates in the study by Blight et al. (2015) however, may be reflective of Facebook's positivity norm.

Despite the relational advantages of intimate self-disclosure, the content of users status updates is strongly influenced by Facebook's social norms (Ziegele & Reinecke, 2017). Social norms are the implicit and explicit rules that dictate acceptable behaviour in a given social context (Cialdini & Trost, 1998). Empirical research has observed a "Facebook positivity bias" wherein Facebook user's generally express more positive than negative emotions in their status updates (Reinecke & Trepte, 2014; Utz, 2015; Waterloo, Baumgartner, Peter, & Valkenburg, 2017; Ziegele & Reinecke, 2017). The positivity bias has been largely attributed to the structure of Facebook friend networks that consist of a large number of weak ties from diverse and conflicting social contexts (Bazarova, Taft, Choi, & Cosley, 2013). Weak ties elicit self-presentation concerns because intensely personal or negative

self-disclosures in status updates can be considered too inappropriate for public sharing (Bazarova, 2012). Posting negative status updates in the presence of many weak ties is therefore risky because the friend network may enforce social sanctions to discourage the behaviour such as disapproval, rejection, or betrayal of the discloser's confidences (Forest & Wood, 2012). Facebook users are more likely to express negative emotions when their friend-network contains a greater proportion of strong ties because the network is made up of trusting relationships that encourage intimate and honest emotional expression (Lin, Tov, & Qiu, 2014).

The valence of the content posted in Facebook status updates appears to be an important factor in successfully obtaining social capital through Facebook use (Shen et al., 2015). Individual differences that influence emotional expression may influence Facebook users likelihood of sharing positive or negative content in their status updates (Reinecke & Trepte, 2014; Winter, 2014). Due to the consequences of inappropriate emotional disclosure on Facebook, such as social rejection (Forest & Wood, 2012), identifying the variables that predict intention to post positive or negative content may help to improve understanding of how users can obtain social capital (such as social and emotional support) online.

The Theory of Planned Behaviour

The present study investigated the variables that shape Facebook users' intentions regarding whether to post positive or negative content in their status updates. A well-validated model that provides a framework for identifying the important predictors in the decision making process preceding a behaviour is the Theory of Planned Behaviour (TPB) (Armitage & Conner, 2001). According to the TPB, intentions are the strongest determinant of behaviour as they are considered to portray one's motivations for completing the behaviour. Intention to perform a

behaviour is influenced by three factors; attitude, subjective norms and perceived behavioural control. Attitudes refer to whether the individual feels favourably or unfavourably towards the behaviour, subjective norms describes ones perceived social pressure to perform the behaviour, and perceived behavioural control describes one's belief in the likelihood that they will perform the behaviour (Ajzen, 1991).

The TPB model has been used to predict performance of a range of behaviours including those related to use of technology, such as Facebook use (Al-Debei, Al-Lozi, & Papazafeiropoulou, 2013). The TPB has been effective in predicting the frequency of Facebook related behaviours (Baker & White, 2010), addictive Facebook tendencies (Pelling & White, 2009), and continued participation in Facebook communities (Al-Debei et al., 2013), however the model has not yet been used to predict the valence of content that Facebook users post in status updates. Pelling and White (2009) and Baker and White (2010) found that the standard TPB variables significantly predicted intention to engage in the Facebook related behaviours, and intentions to perform the behaviour significantly predicted actual performance of that behaviour. Each study, however, found that by expanding the TPB model to account for the influence of positivity norms on Facebook, by including additional variables of belongingness and self-identity (Baker & White, 2010) and group norm and self-esteem (Pelling & White, 2009) respectively, the model's predictive ability was improved. Although the TPB model explains a substantial proportion of variance in behaviour, a considerable proportion of variance remains unexplained by the TPB model. For example, a meta-analysis by Armitage and Conner (2001) found that, across a wide range of behaviours, the TPB variables accounted for 39% of the variance in intentions and 27% of the variance in

behaviour. It is therefore possible that the target behaviour for this study, posting of positive or negative content in status updates, is better predicted by the addition of supplementary variables which reflect positive and negative emotional expression. Ajzen (1991) promotes the addition of variables that are supported by sound theoretical justification and account for additional variance beyond that accounted for by the model. In order to improve the TPB's predictive ability in the current study, measures of neuroticism, extraversion, and self-esteem were included in the model.

Extending the TPB in the Context of Status Updates

Extraversion and Neuroticism. It has been theorised that personality can influence Facebook use through social enhancement and social compensation mechanisms. The social enhancement hypothesis indicates that Facebook users' online social behaviour is similar to their face-to-face behavior (Hollenbaugh & Ferris, 2014). The opposing theory however, the social compensation hypothesis, suggests that introverted and neurotic individuals benefit from Facebook use because the platform compensates for their social deficits (Stronge et al., 2015).

Personality is considered a leading factor in understanding individual's Internet related behaviours (Błachnio, Przepiorka, Senol-Durak, Durak, & Sherstyuk, 2017). Both extraversion and neuroticism have been associated with high levels of social media use (Moore & McElroy, 2012) and emotional disclosure on Facebook (Pentina & Zhang, 2016; Seidman, 2013). Extraversion relates to positive emotionality with high scorers being more friendly, optimistic and talkative as opposed to low scorers (introverts) who tend to be shy and reserved (Ashton & Lee, 2009). Individuals high in extraversion also approach others more easily and engage in more social interaction than introverts (Moore & McElroy, 2012). Consequently,

extraverts are likely to have more friends, higher quality friendships, and more satisfying romantic relationships than introverts (Seidman, 2013) which may explain why extraverts tend to have more Facebook friends (Dupuis, Khadeer, & Huang, 2017), make more contact with their Facebook friends (Moore & McElroy, 2012), and post more status updates (Shen et al., 2015). Neuroticism relates to emotional stability and can be defined as the degree of control one has over their emotions (Dupuis et al., 2017). Neurotic individuals are more vulnerable to negative affect, express more negativity, and are more sensitive to threat (Ashton & Lee, 2009). Individuals high in neuroticism tend to experience higher levels of social anxiety and have difficulty socialising in face-to-face environments (Seidman, 2013). On Facebook, neuroticism is associated with having small friend-networks that consist of a greater proportion of strong ties (Shen et al., 2015) and increased social support seeking (Marshall, Lefringhausen, & Ferenczi, 2015).

Recent studies have found that extraversion and neuroticism traits can influence the content of Facebook users' status updates. Dupuis et al. (2017) developed an instrument to measure the valence of Facebook users' status updates. The instrument was created by an expert panel who brainstormed positively and negatively valenced topics posted in status updates. Participants were 2206 Facebook users who completed a survey that included measures of the big-five personality traits (including neuroticism and extraversion) and the finalised instrument which consisted of 16 topics (9 positively valenced, 9 negatively valenced). Participants were asked to indicate which topics they would be likely to write status updates about if the situation applied to them. Results showed that users high in neuroticism and extraversion were likely to post status updates high in both positive and negative content but that extraverts were more likely to post status updates overall. A

considerable limitation of this study however was that the instrument measured participant's perceived likelihood of engaging in the behaviour but was not a reflection of their actual behaviour (Dupuis et al., 2017).

Shen et al. (2015) avoided this limitation through the use of an online application which directly retrieved data from the profiles of Facebook users, alongside a survey that measured aspects of the users' personalities. Results suggested that Facebook users high in neuroticism wrote longer status updates, used more negative words, and shared more personal information in their status updates than extraverts. Alternatively, extraverted Facebook users shared more videos and photos, wrote a higher number of status updates, and were less likely to use negative words in their status updates than neurotic users (Shen et al., 2015).

Self-Esteem. Self-esteem is an evaluation of one's own worth which individuals are motivated to improve or maintain (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). Individuals with low self-esteem have an overall self-evaluation that is mainly negative whilst those with high self-esteem have more positive overall self-evaluations (Wood, Heimpel, & Michela, 2003). Individuals with high self-esteem experience more positive affect and were found by Hollenbaugh and Ferris (2015) to make more positive self-disclosures on Facebook. Individuals with low self-esteem tend to experience more negative affect, have less satisfying relationships, feel lonelier, and are more likely to experience anxiety or depressive disorders than those with high self-esteem (Forest & Wood, 2012).

Low self-esteem is closely linked with introversion (Forest & Wood, 2012) and neuroticism (Seidman, 2013) hence, similar patterns of emotional disclosure on Facebook have been observed. Forest and Wood (2012) examined emotional disclosure on Facebook in users with low levels of self-esteem. The type of content

participant's posted on Facebook was determined by coding the valence (positive of negative) of participants' 10 most recent status updates. Results showed that Facebook users low in self-esteem expressed more negativity and less positivity in their status updates (Forest & Wood, 2012).

Need to Belong. The belongingness hypothesis states that humans are driven to form and maintain intimate social bonds with others (Stronge et al., 2015), which is a key motivation for Facebook use (Nadkarni & Hofmann, 2012). Status updates facilitate a sense of belonging as they are a means for affiliation, maintaining connections with weak ties, and forming a sense of community (Winter, 2014). Tobin, Vanman, Verreynne, and Saeri (2015) found that when frequent Facebook users were prohibited from sharing any form of information (including status updates) on Facebook for 48 hours, they had lower levels of belonging than they had prior to the experiment.

The current study measured the need to belong as operationalised by Hill (1987), which views the need to belong as a combination of four factors; the need for gratifying personal relationships (positive stimulation), the need for emotional support (emotional support), the need to associate with similar others so as to know how to behave in social situations (social comparison), and the need to be appraised positively by others (attention) (Hill, 1987). This scale has not been used in relation to status update behaviours, however in the Facebook context participants who want to be viewed favourably by their friend networks (attention) and who conform to the positivity norm (social comparison) in order to build and maintain social capital (positive stimulation and emotional support) are likely to post more positive content in Facebook status updates (Waterloo et al., 2017).

The Present Study

This study aimed to investigate the variables that influence Facebook user's intentions regarding the content of their status updates (positive or negative). The theoretical framework of the TPB with the addition of extension variables (extraversion, neuroticism, self-esteem and need to belong) was used to determine the variables that predict intentions to post positively and negatively valenced Facebook status updates.

A major limitation of past research engaging the TPB to investigate Facebook related behaviours is that there is no measure of Facebook users actual behaviour (Baker & White, 2010; Tariq, Sajjad, Usman, & Amjad, 2017). Most research examining behaviours on social media rely on self-report (Dupuis et al., 2017; Seidman, 2013). The current study intended to amend this by viewing Facebook users' status updates from their personal Facebook walls. Viewing actual Facebook content to obtain a measure of behaviour has been found to provide a more effective and accurate reflection of behaviour (Moore & McElroy, 2012) and allows for stronger conclusions to be drawn.

The TPB has effectively predicted intention and actual performance of Facebook related behaviours in past research (Baker & White, 2010; Pelling & White, 2009; Tariq et al., 2017). Therefore, the following hypotheses were made:

Hypothesis 1a: The TPB variables (attitudes, subjective norms, perceived behavioural control) would significantly predict intention to post positive content in status updates.

Hypothesis 1b: The TPB variables (attitudes, subjective norms, perceived behavioural control) would significantly predict intention to post negative content in status updates.

Facebook users high in extraversion tend to experience and express more positive affect and use the Facebook platform to supplement their offline social lives (Moore & McElroy, 2012). Facebook users high in neuroticism tend to experience and express more negative affect and use the Facebook platform to obtain social capital that cannot be obtained offline (Shen et al., 2015). Based on these finding the following hypotheses were made:

Hypothesis 2a: High levels of extraversion would predict intention to post positive content in status updates.

Hypothesis 2b: High levels of neuroticism would predict intention to post negative content in status updates.

Self-esteem levels influence the expression of positively or negatively valenced status updates in that low self-esteem is associated with experiencing and expressing more negative affect than high self-esteem (Forest & Wood, 2012). These patterns of emotional expression were expected to appear in status updates in the current study. Therefore, the following was hypothesised:

Hypothesis 3a: High levels of self-esteem would predict intention to post positive content in status updates.

Hypothesis 3b: Low levels of self-esteem would predict intention to post negative content in status updates.

The need to belong factors (positive stimulation, emotional support, social comparison and attention) capture the need for Facebook users to conform to social norms to build social relationships. Due to positivity norms encouraging positive disclosure in status updates it was hypothesised that:

Hypothesis 4a: High levels of the need to belong factors (positive stimulation, emotional support, social comparison and attention) would predict positive content in status updates.

Hypothesis 4b: Low levels of the need to belong factors (positive stimulation, emotional support, social comparison and attention) would predict positive and negative content in status updates.

Finally, as behavioural intention predicts a variety of behaviours, including Facebook related behaviours (Tariq et al., 2017), it was therefore hypothesised that:

Hypothesis 5a: Intention to post positive content would predict actual posting of positive content in status updates.

Hypothesis 5b: Intention to post negative content would predict actual posting of negative content in status updates.

Method

Participants

The sample comprised of 142 (114 female, 28 male) participants with a mean age of 30.05 years (*SD* = 13.3, range 18 - 66). Eligible participants were 18 years of age or over and were Facebook users.

Design and Analytical Approach

This study employed a prospective design with two waves of data collection conducted three weeks apart. At Time 1, data were collected for the predictor variables of attitudes toward posting status updates (positive and negative), subjective norms about posting status updates (positive and negative), perceived behavioural control over posting status updates (positive and negative), as well as extraversion, neuroticism, self-esteem, and need to belong (emotional support,

attention, positive stimulation, and social comparison), and the outcome variable intention to post status updates (positive and negative). At Time 2, the content of each participant's status updates were recorded to obtain an objective measure of whether participant's post positively or negatively valenced content in their status updates. This was the behavioural outcome measure.

Status Update Posting Behaviour. The target behaviour was defined as posting frequent status updates on Facebook that contained positively or negatively valenced content. Frequent posting was operationalised as posting a status update once a week or more often (Tokunaga & Quick, 2017) .

Direct observation of participants' status updates on their personal Facebook wall provided an objective measure of status update valence for content analysis. With participant consent, status updates were recorded by using the screenshot feature on a computer to capture the status update, the date the status update was posted, and the number of likes and reacts collected by the status update. Each status update was pasted directly into a word document together with the participant's name and their number of Facebook friends. The document was then stored in a secure, password protected computer file and labeled numerically (e.g. Participant1) to protect confidentiality.

Participants were not informed of an exact date on which their status updates would be accessed and recorded. This was to reduce the likelihood that participants would monitor their status update posting behaviour, reducing social desirability effects. However, all Facebook profiles were accessed approximately 3 weeks after completion of the Time 1 questionnaires.

Control variables. To control for differences in patterns of Facebook use, including frequency and perceived importance of frequent Facebook use, Facebook

intensity was included in the regressions. As individuals high in social desirability tend to present themselves more positively to obtain social approval (King & Bruner, 2000), and mindful that the Facebook platform encourages positive expressions of the self (Reinecke & Trepte, 2014), social desirability was also entered as a control variable.

Analysis. Two hierarchical multiple regression analyses were conducted to predict intention to post positive content in status updates and intention to post negative content in status updates. Control variables (social desirability and Facebook intensity) were entered in the first block, the TPB variables (attitudes, subjective norms, perceived behavioural control) were entered in the second block, and the extension variables (extraversion, emotionality, self-esteem, emotional support, attention, positive stimulation, and social comparison) were entered in the third block to identify whether they explained additional variance in the model beyond variance explained by the TPB variables. Pearson's correlation analyses examined whether intention to post positive content in status updates related to actual posting of positive content, and whether intention to post negative content in status updates related to actual posting of negative content.

Content Analysis. Content analysis was used to extract behavioural data from Facebook status updates. This coding approach followed the methods used to code valence of status updates in past studies (Forest & Wood, 2012; große Deters, Mehl, & Eid, 2016). Status updates were coded on a continuum from positive to negative using a 7-point Likert scale with anchors *Strong positive (1)*, *Positive (2)*, *Slight positive (3)*, *Neutral (4)*, *Slight negative (5)*, *Negative (6)*, and *Strong negative (7)*. Higher scores on the scale indicated greater negativity relative to positivity, providing a measure of intensity of the disclosure (Winter, 2014).

Status updates were coded as strong positive when they expressed extreme positivity. An example strong positive status update was *"Got engaged! I've never been happier!"*. Status updates coded as positive and slight positive encompassed the topics: happiness, excitement, sharing accomplishments, expressing love or appreciation, participating in an enjoyable activity (Dupuis et al., 2017), and sharing content considered funny, pleasant, or interesting including images, videos, or memes. Memes are a genre of items (video, text, cartoon, or images), that are considered humorous and shared widely throughout social media (Wiggins, 2015).

A neutral status update contained information but was not positively or negatively valenced. For example, *"Does anyone want cardboard boxes?"*

Status updates coded as slightly negative or negative comprised of the following topics: feeling lonely, sad, angry, mad or depressed, describing a situation that is stressful, scary or frustrating, major world events that have had negative outcomes, and sharing content considered upsetting, or unjust (Dupuis et al., 2017). Status updates were coded as strong negativity when they expressed extreme negativity. For example; *"I am emotionally wrecked…I've been keeping myself so busy to try and ignore the misery that is my existence, but I'm very quickly burning out"*.

An eighth category, *unable to code*, was also used when valence was unable to be determined. If a status update contained both positive and negative content it was coded based on the valence of the overall impression conveyed. Status updates from two participants were not written English and were excluded from analysis. Status updates were only analysed if they contained original content created by the participant. Content created by another Facebook user and shared by the participant

was only included in the analysis if the participant contributed their own thoughts, opinions, ideas or emotions in the post.

To ensure inter-coder reliability, a subset of 122 status updates was independently coded by a second rater. Scores between the two raters were strongly, positively correlated, $r(120)=.845$, $p<.001$.

***A priori* power analysis.** The appropriate sample size for a regression model with 10 predictor variables was determined using the G*Power analysis program (Faul, Erdfelder, Buchner, & Lang, 2009). Medium to large effect sizes were expected based on past research on internet related behaviours (Al-Debei et al., 2013; Baker & White, 2010; E. Kim, Lee, Sung, & Choi, 2016; Tariq et al., 2017). Based on finding a medium effect size ($f^2 = .15$, Cohen, 1997) with alpha set at .05 and a desired power of .8, the recommended sample size was 118. The sample size exceeded this recommendation.

Materials

Copies of all items are presented in Appendix A.

Demographic Information. Participants indicated their sex and age.

Facebook Intensity Scale. The Facebook Intensity Scale (N. B. Ellison, Steinfield, C., & Lampe, C. , 2007) measured the extent to which Facebook use is embedded into everyday life and emotional reliance on regular Facebook use. An example item is '*I feel I am part of the Facebook community*'. Participants rated their agreement with each of six items with anchors ranging from *Strongly disagree (1)* to *Strongly agree (5)*. Higher scores indicated greater intensity of Facebook use. Two additional items measure the number of Facebook friends the participant has and the amount of time they typically spend on Facebook per day. This scale is a valid

measure of intensity of Facebook use (Burke, Marlow, & Lento, 2010), with very good internal consistency (α = .85, (Lowe-Calverley & Grieve, in press).

Social Desirability. The short form Social Desirability Scale (Crowne & Marlowe, 1960) was used (13 items). Participants indicate whether each item was true or false as it pertained to them. An example item was, '*I sometimes feel resentful when I don't get my way*'. The 13 item short form scale was found by Reynolds (1982) to be a reliable and valid measure of social desirability. The Kuder-Richardson formula 20 coefficient is .76 indicating satisfactory internal consistency (Reynolds, 1982).

Theory of Panned Behaviour Questionnaire. Items were developed to measure TPB (Ajzen, 1991) variables in regards to posting both positive and negative status updates, and were written per Ajzen's recommendations (2002) and in line with other research examining antecedents to online behaviour (E. Kim et al., 2016; Tariq et al., 2017).

Attitude items measured the participant's overall evaluation of performing the target behaviour (Ajzen, 2002), evaluating both experiential (feelings towards performing the behaviour) and instrumental (beliefs regarding the results of behaviour) aspects. Attitudes were assessed using eight 7-point semantic differential response scales (four each for positive and negative status updates). Participants responded to the statements; '*For me to post a status update that contains positive* [negative] *emotions would be'* with anchors ranging from *Harmful (1)* to *Beneficial (7)*, *Pleasant (1)* to *Unpleasant (7)*, *Bad (1)* to *Good (7)*, and *Worthless (1)* to *Valuable (7)*. Two of the items were reversed to reduce bias. Higher scores indicated a more positive attitude towards the behaviour.

Subjective norms items measured perceived social pressure to perform the target behaviour. Six items reflected both injunctive norms (perceptions of which behaviours are approved of and disapproved of) and descriptive norms (perceptions of which behaviours are typically performed by others). For example, items included '*The people in my life whose opinions I value think that I should post status updates containing positive* [negative] *emotions on Facebook*' and *'Most people who are important to me post status updates on Facebook that contain positive* [negative] *emotions'*. Participants rated their agreement on a Likert scale with anchors ranging from S*trongly agree (7)* to *Strongly disagree (1)*. Higher scores indicated greater perceived pressure to perform the behaviour.

Perceived behavioural control items measured the participant's confidence in their ability to perform the behaviour. Three items reflected the participant's sense of self-efficacy with regards to performing the behaviour, for example; *'If I wanted to I could post a status update containing positive* [negative] *emotion on Facebook'.* A further three items measured participant's control over performing the behaviour, for example; '*I have complete control over whether I post a status update containing positive* [negative] *emotion on Facebook*'. Participants rated their agreement with each item with anchors ranging from S*trongly agree* (7) to *Strongly disagree (1)* with higher scores indicated higher levels of perceived behavioural control over performing the behaviour.

Intentions to post positive and negative status updates were measured using six items. Example items include '*I intend to post a status update containing positive* [negative] *emotion within the next two weeks*': S*trongly agree (7)* and *Strongly disagree (1)*, and, '*How likely is it that you will post a status update*

containing positive [negative] *emotion within the next two weeks?*. Higher scores indicate stronger behavioural intention.

Extraversion and Neuroticism. The extraversion and emotionality subscales from the HEXACO-60 (Ashton & Lee, 2009) were used. Subscales consist of ten items each, some of which were reversed. Sample items are '*I feel reasonably satisfied with myself overall*' (extraversion) and '*I sometimes can't help worrying about little things*'(emotionality). Participants responded using a 5-point Likert scale with anchors ranging from *Strongly Agree (5)* to *Strongly Disagree (1)*. Higher scores on the subscales indicated higher levels of the construct. The HEXACO-60 is a valid measure of personality (Lee & Ashton, 2004) and both the extraversion and emotionality subscales have good internal consistency (α = .78 and .77 respectively; (R. Grieve, 2012).

Self Esteem. The Rosenberg Self-Esteem Scale was assessed trait self-esteem (Rosenberg, 1979). The scale consists of 10 items including, *'On the whole, I am satisfied with myself'*. Participants responded on a 4-point Likert scale with anchors ranging from *Strongly agree (4)* to *Strongly disagree (1)*. Some items in the scale were reversed to reduce bias. Higher scores indicated higher levels of trait self-esteem. The Rosenberg Self-Esteem scale has been found to be a valid measure of self-esteem across genders and ethnicities. Cronbach's alpha indicates good internal consistency (α = .88, Greenberger, Chen, Dmitrieva & Farruggia, 2002).

Need to Belong. The Interpersonal Orientation Scale (Hill 1987) measured participants' need to belong. Four subscales (Positive Stimulation, Emotional Support, Social Comparison and Attention) evaluate the motivation to affiliate with others. The positive stimulation subscale (nine items) measures gratification from interpersonal relationships. An example item was, *"I think I get satisfaction out of*

contact with others more than most people realise". The emotional support subscale (six items) measures the extent to which social contact reduces negative affect. For example; *"One of my greatest sources of comfort when things get rough is being with other people"*. The social comparison subscale comprises five items measuring desire to reduce stress by looking to similar others for behavioural cues in ambiguous social situations. An example item is *"I prefer to participate in activities alongside other people rather than by myself because I like to see how I am doing on the activity"*. The attention subscale consists of six items that reflect the desire to be viewed positively and approved of by others. For example; *"I mainly like people who seem strongly drawn to me and who seem infatuated with me"*. Participants responded using a 5-point Likert scale to indicate how true they perceive each statement to be of them, with anchors ranging from *Not at all true (5)* to *Completely true (1)*. Higher scores indicated less need to belong. Cronbach's alpha coefficient of the subscales ranged from $\alpha = .77$ - .84 (Leary, Kelly, Cottrell, & Schreindorfer, 2013) indicating good internal consistency.

Procedure

Ethics approval was obtained from the Tasmanian Human Research and Ethics Committee (reference number H0016679, Appendix B). Participants were recruited via word of mouth, advertisements on social media, posters, as well as on the SONA research participation system. Participation was voluntary.

The study involved two waves of data collection, conducted between August and October. In the first wave, participants completed a secure online survey (via SurveyMonkey). The information sheet was presented online (Appendix C), and participants were required to give informed consent before continuing to the survey items. On the final page of the survey, participants who posted frequent status

updates to Facebook were invited to send a Facebook 'friend request' from their personal Facebook account to the research project's Facebook page so that their status updates could be accessed and recorded. The research Facebook page was called 'Emma Brown (Facebook Status Update Study)'. In line with Moore and McElroy's (2012) methodology, the research Facebook page was created specifically for the study and was clearly identifiable to participants as being for research purposes only.

Each participant's friend request was accepted three weeks after submission of the survey (i.e., Time 2). When a friend request was accepted the participant's Facebook wall became publically viewable by the researcher. All status updates within the 3-week time period were recorded verbatim. The participant was then sent a private message on Facebook thanking them for their participation and they were 'unfriended' by the research Facebook page. Following participation, all participants were invited to enter the draw to win one of six $50 gift vouchers or to receive 30 minutes of research credit if applicable.

When data collection and coding of status updates was complete, each participant's survey responses and their behavioural measures were linked in a single data set. At this point the participant's names were deleted from the file so that no identifying information remained, ensuring anonymity for data analysis.

Results

Preliminary Data Screening and Assumption Checks

All relevant assumptions were tested. Four cases were identified as having residual values greater than 3 and were inspected as possible outliers (Tabachnick & Fidell, 2014). Analyses were run progressively excluding each outlier. Two cases were influential to the model predicting positivity intentions and two cases were

influential to the model predicting negativity intentions. This violates the assumption of homoscedasticity which assumes that the residuals have a constant variance at each level of the predictors (Tabachnick & Fidell, 2014). Partial plots of the residuals were viewed and, after the removal of outliers, the residuals vary randomly and evenly around zero suggesting the assumption was met (Tabachnick & Fidell, 2014). Removed these cases left separate data sets for the analysis of positivity intentions and negativity intentions.

Probability plots for each variable showed that the residuals did not deviate from the diagonal suggesting a normal distribution (Field, 2013).

Linearity assumes that the outcome variable is linearly related to the predictor variables (Tabachnick & Fidell, 2014). Scatterplots showed that residuals were randomly and evenly scattered around zero which indicated linear relationships between intentions to post positive status updates and the predictor variables and between intentions to post negative status updates and the predictor variables (Tabachnick & Fidell, 2014)

The assumption of independent errors is that the residual terms are not correlated. The Durbin-Watson test revealed values greater than 1 and less than 3 for both the model predicting positivity intentions (1.52) and the model predicting negativity intentions (1.73). Based on recommendations by (Tabachnick & Fidell, 2014) this assumption was considered met.

Multicollinearity was assessed by viewing Tolerance values and Variance Inflation Factors (VIF) to check that there are no overly strong correlations between variables. For all predictor variables, Tolerance values were greater than 0.1 and VIF values were less than 10 which indicates that the assumption was met (Tabachnick & Fidell, 2014).

Descriptive Statistics

The means, standard deviations, and 95% Confidence Intervals of all variables are presented in Table 1. Participants in the present study reported similar levels of extraversion and neuroticism as reported in Grieve and Watkinson (2016). Self-esteem scores were found to be within the expected range for the sample population based on norms reported by Sinclair et al. (2010). Attention, positive stimulation, social comparison and emotional support means and standard deviations were comparable to means and standard deviations reported by Hill (1987). Internal consistency reliabilities (Cronbach's α) of the TPB scales were generally between good and excellent except for the subjective norms scales which suggested potentially questionable internal consistency. This was not considered a cause for concern however, due to the small number of items in the scale (Cortina, 1993). Internal consistency reliabilities (Cronbach's α) of the Facebook intensity scale, social desirability scale, extraversion scale, neuroticism scale, self-esteem scale and need to belong scale ranged from good to excellent.

Table 1

Descriptive Statistics of All Variables

	Mean	Std. Deviation	95%CI
Facebook Intensity	21.58	4.8	[20.78,22.38]
Social Desirability	18.79	2.03	[18.46,19.13]
Attitudes Negative	10.22	3.63	[9.62,10.82]
Attitudes Positive	19.65	2.75	[19.18,20.10]
Negative Subjective Norm	6.7	3.03	[6.22,7.23]
Positive Subjective Norm	14.5	3.47	[13.95,15.10]
PBC Negative	15.01	4.01	[14.34,15.68]
PBC Positive	18.87	2.34	[18.48,19.25]
Intention Negative	5.48	3.44	[4.91,6.05]
Intention Positive	12.82	4.37	[12.11,13.55]
Extraversion	31.81	6.45	[30.73,32.88]
Emotionality	33.71	6.67	[32.60,34.82]
Self Esteem	26.42	1.88	[26.11,26.73]
Emotional Support	17.15	5.99	[16.15,18.15]
Attention	14.93	5.77	[13.97,15.89]
Positive Stimulation	27.60	7.95	[26.28,28.93]
Social Comparison	14.65	4.41	[13.92,15.38]
Self-report Number of Friend	540.49	503.5	[456.66,624.32]
Observed Number of Friends	461.93	330.82	[331.06,592.79]
Status Updates Posted	21.67	14.92	[15.76,27.57]
Status Update Valence	2.93	.57	[2.70,3.16]

Note. CI = Confidence Interval.

Bivariate Correlations

All effect sizes are interpreted in line with Cohen's (1992) recommendations. The correlation matrices containing the predictor variables for intention to post positive content and intention to post negative content are presented in Table 2 and 3 respectively. All TPB subscales (attitude, subjective norms, PBC) showed weak to moderate relationships with one another. There were also moderate to strong relationships between the TPB variables and intention variables (except for PBC with intention to post negative content). Validation of the TPB in past research has found similar patterns of correlation (Armitage & Conner, 2001).

The need to belong subscales (attention, positive stimulation and social comparison, emotional support) all showed moderate to strong relationships with one another. These findings are consistent with past research (Hill, 1987) .

Table 2

Bivariate Correlations of Positive Intention Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Facebook Intensity	-												
2. Social Desirability	-.115	-											
3. Attitude	.225**	-.016	-										
4. Subjective Norm	.361**	.024	.463**	-									
5. PBC	.181*	.177*	.363**	.155	-								
6. Extraversion	-.040	.320**	.105	.003	.143	-							
7. Emotionality	.231**	-.115	.214*	.203*	.024	-.244**	-						
8. Self-Esteem	.049	-.277**	-.073	-.011	-.087	-.077	.060	-					

9. Emotional Support	.243**	-.131	.173*	.152	-.017	.185*	.510**	.214*	-				
10. Attention	.332**	-.252**	-.002	.258**	.033	-.043	.256**	.217**	.719**	-			
11. Positive Stimulation	.217**	-.015	.220**	.148	.063	.178*	.358**	.186*	.687**	.499**	-		
12. Social Comparison	.274**	-.138	.038	.141	.023	-.012	.332**	.202*	.243**	.673**	.709**	-	
13. Positive Intention	.219**	-.114	.485**	.638**	.300*	-.025	.164	.059	.113	.140	.189*	.069	-

Note. PBC = Perceived behavioural control.

*p < .01, **p < .001.

Table 3

Bivariate Correlations of Negative Intention Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
14. Facebook Intensity	-												
15. Social Desirability	-.115	-											
16. Attitude	.056	-.007	-										
17. Subjective Norm	.136	-.026	.531	-									
18. PBC	.169	-.042	.279	.168	-								
19. Extraversion	.083	.321**	.046	-.066	-.076	-							
20. Emotionality	.194*	-.096	-.122	-.007	.078	-.241**	-						
21. Self-Esteem	.032	-.272**	.029	.018	.112	-.091	.052	-					

1. Emotional Support	.308**	-.135	-.036	.106	-.041	.181*	.492**	.221**	-				
2. Attention	.324**	-.270**	.032	.166*	-.025	-.055	.283**	.239**	.526**	-			
3. Positive Stimulation	.273**	-.028	-.002	.116	-.012	.183*	.358**	.183*	.727**	.530**	-		
4. Social Comparison	.687**	-.137	-.054	.084	-.066	.011	.318**	.210*	.687**	.694**	.719**	-	
5. Negative Intention	.213**	-.119	.571**	.653**	.269**	-.132	.010	.116	.121	.232**	.123	.161	-

Note. PBC = Perceived behavioural control.

**p < .01, **p < .001.*

Inferential Statistics

Hierarchical Multiple Regression Predicting Intention to Post Positive Status Updates. Table 4 presents the results of the three step hierarchical multiple regression analysis predicting intentions to post positive content in Facebook status updates from the TPB variables (attitude, social norms, and PBC) and the extension variables (extraversion, neuroticism, self-esteem, attention, positive stimulation, social comparison, and emotional support), controlling for Facebook intensity and social desirability.

In Step One, Facebook intensity and social desirability explained 7.1% of variance of intentions to post positive status updates, $R = .26$, adjusted $R^2 = .057$, $F(2, 141) = 5.36$, $p = .006$, and showed a small effect $f^2 = .07$. Facebook intensity significantly predicted a stronger intention to post positive status updates in the future, however social desirability was not a significant individual predictor.

Step Two included attitude, subjective norms, and PBC in the model, $R = .69$, $F(5,138) = 26.43$, $p < .001$. The variables explained an additional 41.9% of variance, a significant improvement in the model, adjusted $\Delta R^2 = .47$, $F\Delta(3, 138) = 37.69$, $p = < .001$, and showed a large effect $f^2 = .96$. Less social desirability, higher attitudes, higher subjective norms and higher PBC significantly predicted a stronger intention to post positive status updates in the future but Facebook intensity did not.

Step Three included extraversion, neuroticism, self-esteem, attention, positive stimulation, social comparison, and emotional support in the model, $R = .72$, $F(12,131) = 11.57$, $p < .001$. The variables explained an additional 2.5% of variance and this change was not significant, adjusted $\Delta R^2 = .47$, $F\Delta(7, 131) = .97$, $p = .451$. When all predictor variables were entered into the model, higher levels of social

desirability, subjective norms, PBC, and positive stimulation significantly predicted intentions to post positive status updates in the future.

Table 4

Multiple Hierarchical Regression Results Predicting Positivity Intentions

Model		*b*	*SE B*	ß	*p*	*95% CI for* ß
Step 1	constant	12.07	3.82		$p = .002$	[4.52, 19.62]
	Facebook Intensity	0.21	0.07	.24	$p = .005$	[0.07, 0.36]
	Social Desirability	-0.21	0.17	-.10	$p = .235$	[-0.55, 0.14]
Step 2	constant	-1.20	3.45		$p = .728$	[-8.02, 5.62]
	Facebook Intensity	-0.04	0.06	-.04	$p = .533$	[-0.16, 0.08]
	Social Desirability	-0.37	0.13	-.18	$p = .006$	[-0.63, -0.11]
	Negative Attitudes	0.26	0.12	.12	$p = .030$	[0.03, 0.49]
	Negative Subjective norm	0.70	0.09	.55	$p = < .001$	[0.52, 0.88]
	Negative PBC	0.34	0.13	.18	$p = .007$	[0.09, 0.59]
Step 3	constant	-1.56	6.15		$p = .800$	[-13.73, 10.61]
	Facebook Intensity	-0.03	0.06	-.03	$p = .679$	[-0.15, 0.10]
	Social Desirability	-0.40	0.15	-.19	$p = .010$	[-0.70, -0.10]
	Attitudes Positive	0.18	0.13	.11	$p = .153$	[-0.70, 0.44]
	Subjective Norm Positivity	0.73	0.10	.57	$p = < .001$	[0.54, 0.92]

	PBC Positive	0.37	0.13	.20	$p = .005$	[0.11, 0.62]
	Extraversion	-0.03	0.05	-.05	$p = .514$	[-0.14, 0.07]
	Emotionality	-0.01	0.05	-.02	$p = .794$	[-0.12, 0.09]
	Self-esteem	0.08	0.15	.04	$p = .581$	[-0.22, 0.38]
	Emotional Support	-0.04	0.08	-.05	$p = .639$	[-0.20, 0.12]
	Attention	-0.04	0.07	-.05	$p = .570$	[-0.18, 0.10]
	Positive Stimulation	0.14	0.06	.25	$p = .018$	[0.02, 0.25]
	Social Comparison	-0.13	0.11	-.13	$p = .226$	[-0.35, 0.08]

Note. CI = Confidence Interval.

Hierarchical Multiple Regression Predicting Intention to Post Negative Status Updates. Table 5 presents the results of the three step hierarchical multiple regression analysis predicting intentions to post negative content in Facebook status updates from the TPB variables (attitude, social norms, and PBC) and the extension variables (extraversion, neuroticism, self-esteem, attention, positive stimulation, social comparison, and emotional support), controlling for Facebook intensity and social desirability.

In Step One, Facebook intensity and social desirability explained 5.2% of variance of positivity intentions, $R = .26$, adjusted $R^2 = .052$, F (2, 138) = 4.86, $p = .009$, and showed a moderate effect $f^2 = .34$. Facebook intensity significantly predicted a stronger intention to post positive status updates in the future however social desirability was not a significant individual predictor.

Step Two included attitude, subjective norms and PBC in the model, $R = .77$, F (5,135) = 4.86, p < .001. The variables explained an additional 52.6% of variance, a significant improvement in the model, adjusted $R^2 = .057$, $\Delta R^2 = .57$, $F\Delta$ (3, 135) = 57.90, $p < .001$, and showed a large effect $f^2 = 3.33$. Attitudes and subjective norms significantly predicted a stronger intention to post positive status updates in the future but Facebook intensity, social desirability and PBC did not contribute significantly to the model.

Step Three included extraversion, neuroticism, self-esteem, attention, positive stimulation, social comparison, and emotional support in the model, $R = .79$, F (12,128) = 17.7, $p < .001$. The variables explained an additional 3.4% of variance and this change was not significant, adjusted $R^2 = .059$, $\Delta R^2 = .59$, $F\Delta$ (7, 128) = 1.63, $p = .132$.

When all predictors were entered into the model, more favourable attitudes and higher subjective norms positively predicted negativity intentions. No other individual predictors contributed significantly to the final model.

Table 5

Multiple Hierarchical Regression Results Predicting Negativity Intentions

Model		*b*	*SE B*	ß	*p*	*95% CI for* ß
Step 1	constant	4.58	2.47		$p = .066$	[-0.303, 9.645]
	Facebook Intensity	0.13	0.05	.23	$p = .007$	[0.04, 0.23]
	Social Desirability	-0.13	0.11	-.09	$p = .267$	[-0.35, 0.10]
Step 2	constant	-0.11	1.75		$p = .951$	[-3.58, 3.36]
	Facebook Intensity	0.60	0.30	.10	$p = .093$	[-0.01, 0.12]
	Social Desirability	-0.12	0.08	-.09	$p = .103$	[-0.27, 0.03]
	Negative Attitudes	0.28	0.05	.35	$p < .001$	[0.18, 0.39]
	Negative Subjective norm	0.44	0.06	.47	$p < .001$	[0.32, 0.56]
	Negative PBC	0.04	0.04	.05	$p = .393$	[-0.05, 0.12]
Step 3	constant	-3.06	3.32		$p = .359$	[-9.64, 3.51]
	Facebook Intensity	0.04	0.04	.07	$p = .230$	[-0.03, 0.11]
	Social Desirability	-0.02	0.08	-.01	$p = .834$	[-0.19, 0.15]
	Attitudes Negative	0.32	0.06	.39	$p < .001$	[0.21, 0.43]
	Subjective Norm Negativity	0.41	0.06	.44	$p < .001$	[0.29, 0.53]
	PBC Negative	0.03	0.04	.04	$p = .544$	[-0.06, 0.11]

Extraversion	-0.06	0.03	-.13	$p = .065$	[-0.11, 0.00]
Emotionality	-0.01	0.03	-.01	$p = .886$	[-0.07, 0.06]
Self-esteem	0.08	0.09	.05	$p = .388$	[-0.10, 0.25]
Emotional Support	0.01	0.05	.02	$p = .862$	[-0.87, 0.10]
Attention	0.02	0.04	.04	$p = .645$	[-0.06, 0.10]
Positive Stimulation	-0.02	0.03	-.05	$p = .594$	[-0.08, 0.05]
Social Comparison	0.09	0.06	.13	$p = .184$	[-0.04, 0.21]

Note. CI = Confidence Interval

Behavioural Data

From the 141 participants who completed the measures at Time 1, 39 participants contributed data at Time 2 (5 male, 34 female, age = 26.64, range 18 - 53). Out of the participants at Time 2, data on the number of friends in the participant's friend network could only be obtained from 27 participants due to the use of privacy settings restricting the viewership of this information. Descriptive statistics for the behavioural data are presented in Table 1. Behavioural variables include valence of Facebook status updates, the number of status updates posted in the three-week period, and the number of friends in the friend network.

On average, participants in the sample posted 3 status updates per week and had an average of 462 people in their friend-network.

A correlation matrix containing the behavioural variables is presented in Table 6.

A Pearson correlation analyses showed that there was no significant relationship between the number of friends in the friend-network and the number of status updates posted, (n= 27), $r(25) = .12$, 95% CI [-.27, .47], $p = .555$. A further analysis showed a strong positive relationship between self-reported number of friends and actual number of friends in the friend-network, (n= 27), $r(25) = .96$, 95% CI [.91, .98], $p < .001$.

Table 6

Correlations between Behavioural Variables.

	1	2	3	4
6. Self-report Number of Friends	-			
7. Observed Number of Friends	.959**	-		
8. Status Updates Posted	.061	.119	-	
9. Status Update Valence	.434	-.206	.425*	-

*$p < .01$, **$p <$.

Relationship between Intentions and Status Update Valence

Pearson correlation analyses showed the relationship between intentions and actual behaviour. As previously described, status updates were coded using a 7-point Likert scale (*1= Strong positive* to *7= Strong negative*). Overall, status updates in the sample tended to be positive to slightly positive. There was no significant relationship between self-reported intention to post positive status updates at Time 1 and actual positively valenced status updates as collected at Time 2, (n= 39), $r(37)$ = .03, 95% CI [-0.28, 0.34], p = .846. Only a small effect was evident (Cohen, 1992), and only 0.09% of variance in actual positive status update posting behaviour was explained by intention to post positive status updates. There was a significant relationship between self-reported intention to post negative status updates at Time 1 and actual negatively valenced status updates as collected at Time 2, (n= 39), $r(37)$= .56, 95% CI [0.29, 0.74], $p < .001$. This represented a large effect (Cohen, 1992), with 31.36% of variance in negative status update posting behaviour explained by intentions to post negative status updates.

Discussion

This study tested the utility of an extended TPB model, incorporating extraversion, neuroticism, self-esteem, and the need to belong, to predict intentions to post positively or negatively valenced content in Facebook status updates. The study also investigated whether intentions to post positively or negatively valenced content in status updates anticipated actual performance of the behaviour.

Theory of Planned Behaviour

The first hypothesis, that the TPB variables of attitude, subjective norms and perceived behavioural control would significantly predict the intention to post both

positive (hypothesis 1a) and negative (hypothesis 1b) content in status updates was supported. In the final model, attitudes were a significant predictor of both intentions to post positively valenced and negatively valenced status updates, with favourable attitudes towards posting positive or negative content in status updates positively influencing the behavioural intention. This finding was in line with numerous studies examining attitudes towards intentions in Internet behaviour (Baker & White, 2010; E. Kim et al., 2016; Pelling & White, 2009; Tariq et al., 2017).

Subjective norms were the strongest predictors of both intentions to post positively and negatively valenced status updates. These findings are inconsistent with some past research which have found subjective norms to be a weak or non-significant predictor of behaviour (Armitage & Conner, 2001; Baker & White, 2010). Armitage and Conner (2001) suggest that a weak effect of subjective norms in the TPB is a consequence of no explicit social pressure to perform a particular behaviour. The role of subjective norms in the current study is therefore indicative of the strong role of social norms on Facebook. The most prominent social norm on Facebook, the positivity bias, indicates that Facebook users' prefer to post positive content in status updates as negative content carries social risks such as disapproval or rejection from the friend network (Forest & Wood, 2012). The current findings suggest that Facebook users consider these social pressures when making decisions about what content to post in status updates.

Perceived behavioural control was a significant predictor of intention to post positive, but not negative content. Relevant research shows inconsistencies in the predictive ability of PBC for internet related behaviours (Al-Debei et al., 2013; Pelling & White, 2009; Tariq et al., 2017). Variabilities in research findings are likely due to PBC varying across situations and behaviours (Ajzen, 1991). Facebook

users typically write status updates to 'update' their friend-networks about recent thoughts and experiences (Dupuis et al., 2017). As posting positively valenced status updates is the norm on Facebook (Reinecke & Trepte, 2014), the current findings may reflect participant's beliefs that posting positive content in a status update is easy and under one's control, whilst posting negative content is in reaction to a negative experience and hence, not under volitional control.

The current study also controlled for social desirability, which was found to be a significant negative predictor of positive status updates. This result was unexpected as social desirability is associated with the desire to present the self positively. This highlights the utility of incorporating the social desirability scale as a control in TPB experiments which rely heavily on self-report data (Armitage & Conner, 2001).

Large effect sizes were evident for each regression including the TPB and control variables. Overall, it seems that the TPB is an effective model for predicting intentions to post positively or negatively valenced content in Facebook status updates.

Extension Variables

An interesting finding was the non-significance of the extension variables in predicting the intention to post positive or negative status updates. Hence, hypotheses 2a and 2b were not supported in that extraversion did not predict intention to post positive content and neuroticism did not predict intention to post negative content. Hypotheses 3a and 3b were also not supported in that high self-esteem did not predict intention to post positive content and low self-esteem did not predict intention to post negative content. The hypothesis that high levels of the need to belong variables (positive stimulation, emotional support, social comparison and

attention) would predict positive content in status updates (4a) was only partially supported. Positive stimulation predicted intention to post positive status updates. This finding is in line with the theoretical implications of the social enhancement hypothesis which states that Facebook users' online social behaviour is similar to their face-to-face behaviour (Hollenbaugh & Ferris, 2014). The current data indicate that Facebook users might use positive updates to augment existing social ties. Facebook, therefore, provides an additional channel through which users' can benefit from interpersonal relationships. Research supports this theory in that sharing status updates with the friend-network allows users' to derive positive stimulation from feeling socially connected on Facebook (Blight et al., 2015).

Hypothesis 4b, that low levels of the need to belong variables will predict negative and positive content in status updates was not supported. This hypothesis was based on the theoretical implications of the positivity bias. If Facebook users are not motivated to belong on Facebook then they would be less likely to conform to the positivity bias because they are not impacted by social pressures to act in a socially acceptable way (Reinecke & Trepte, 2014). It is also possible however, that Facebook users not motivated to seek belonging on Facebook post infrequent status updates (Phua, Jin, & Kim, 2017). When not motivated to maintain social ties, Facebook users' may instead use Facebook passively for information gathering, viewing content posted on Facebook but not contributing to or interacting with the content (Davenport, Bergman, Bergman, & Fearrington, 2014).

Broadly, the findings that the extension variables do not predict emotional valence in status updates is in line with the sufficiency assumption; that the TPB variables are sufficient to predict intention and behaviour and additional variables to the model will not improve prediction (Ajzen, 2011). This assumption has been

challenged as past research has identified additional variables which account for variance in behaviour beyond that accounted for by intention and PBC (Tariq et al., 2017). In the current study, the non-significance of the extensions variables perhaps indicates that they were not specific enough to status update posting behaviour (Ajzen, 2011). Personality and self-esteem are considered global traits because their effects remain stable over time and varying situations (Ashton & Lee, 2009; Scheier, Carver, & Bridges, 1994). The influence of the personality and self-esteem variables therefore, were likely mediated by the TPB variables (Conner & Abraham, 2001). For example, in Darvell, Walsh and White's (2011) study using the TPB to predict partner monitoring behaviour on Facebook, the self-esteem variable was not a significant variable because it measured general self-worth as opposed to ones perceived self-worth within a relationship (Darvell et al., 2011).

Future research incorporating the TPB to predict emotional disclosure in status updates should build on these findings and identify variables that are behaviour-specific to posting Facebook status updates. For example, instead of personality as a predictor of emotional disclosure, future research may consider emotional state. For example, experiencing psychological distress such as depression has been identified in past research to predict expression of more negative emotions on Facebook (Bazarova, Choi, Whitlock, Cosley, & Sosik, 2017).

Behaviour from Intention

A strength of this study was that behavioural data was obtained through examination of participants' actual Facebook status updates. Intentions were measured at Time 1, with behaviours measured at Time 2 (three weeks later). This method provided a more reliable measure of status update posting behaviour than could be obtained from self-report data (Moore & McElroy, 2012). Observation of

actual behaviour was a novel contribution of the current study as much of the research incorporating the TPB relies on self-report (Baker & White, 2010; Pelling & White, 2009). Viewing actual behaviour is especially important in the study of online domains due to social desirability pressures experienced by Facebook users (Utz, 2015).

Participants in the current study tended to post more positively valenced than negatively valenced status updates. These results provide support for the Facebook positivity bias observed in past research wherein Facebook users tend to post more positive than negative content in their Facebook status updates (Reinecke & Trepte, 2014).

Hypothesis 5a was not supported in that intention to post positive content did not significantly predict actual posting of positive content in status updates. Further, the effect size was extremely small. Hypothesis 5b, however, was supported in that intention to post negative content predicted actual posting of negative content in status updates. A large effect was evident and intentions explained 31.36% of the variance in posting negatively valenced status updates.

These findings reflect the positivity bias in that posting positively valenced status updates is the default behaviour for most Facebook users. As Facebook users are expected and encouraged to post positive content in status updates (Forest & Wood, 2012), Facebook users perform this behaviour without much hesitation and do not make strong intentions to perform the behaviour. Posting negative status updates diverge from positivity norms and intention to perform the behaviour has a greater effect because Facebook users have to weigh up the costs and benefits of posting negative content. The benefit is that the user can obtain social capital, such

as social support, however the cost is the possibility of embarrassment or social rejection (Forest & Wood, 2012).

Intentions in the current study were measured in terms of valence to capture the effect of the positivity bias. However, whilst the content of status updates was generally code-able as positive or negative on a continuum using existing methodologies (große Deters et al., 2016), there were subthemes that could also warrant attention in future studies with a broader scope. For example, a subtheme of humour is warranted as status updates are major vessels for the dissemination of memes. Memes as a genre of content are typically humourous and relatable (Wiggins & Bowers, 2015) however, memes are highly specific to social and cultural contexts and therefore their inherent humour may be interpreted differently depending on the structure of the friend network. Future research would benefit from delineating between different categories of humour on social networking platforms.

Activism is also prevalent on Facebook with users engaging in the political landscape by sharing articles and opinions in their status updates (Mackay, White, & Obst, 2016). In the current study, status updates were obtained from July to October 2017 which corresponded with the conduct of a marriage equality plebiscite in Australia, a divisive social issue (Bongiorno, 2017). The status updates from a number of participants' in the current study reflected their beliefs regarding marriage equality, and this may have diverged from their usual patterns of emotional disclosure. Activism may be approved of or disapproved of by social networks depending on factors outside of whether they express positive or negative emotions, such as whether the majority of the friend network agree with the purpose of the activism. Activism is therefore also a subtheme for consideration in future research.

Limitations and Additional Considerations for Future Research

A limitation of the current research was attrition for the behaviour measure. A drop off in completion of the behavioural measure is common in TPB research (Baker & White, 2010; Mackay et al., 2016). For example, in a recent study by Mackay et al. (2016), only 63 out of 171 participants completed the subsequent behavioural measure. Behavioural data from a greater number of participants in the current study would have allowed for more in-depth statistical analysis and larger sample sizes should be a focus for future research in this area.

It is also important to note that the current study focused only on Facebook. Although it is the most popular social networking site (Alexa.com, 2017), Facebook is only one of many social networking sites. It follows that the current findings should not be overgeneralised to apply to all social media, and that additional explicit investigation of other social media is warranted. In particular, as Snapchat (an image-based instant messaging service) use is predicted by social norms (Bayer, Ellison, Schoenebeck, & Falk, 2016) and a drive to form connections with others (Rachel Grieve, 2017) it would be interesting to examine the extent to which the positivity bias might influence Snapchatting exchanges. It has also been noted that Instagram (a photo-sharing application) allows users to selectively present themselves in a more positive light (Sheldon & Bryant, 2016) thus it would be similarly prudent to examine the role of the positivity bias on that platform as well.

The prospective study design used in the current research allowed for inferences to be made between intentions and subsequent behaviour. An improvement to this design would be a longer-term longitudinal research method in which the predictors and behaviour are repeatedly measured over an extended time period to examine whether changes in the predictors correspond to changes in

behaviour. A longitudinal design may identify the effect of situational factors that produce changes in status update posting behaviour.

Accordingly, the internal validity of the current study may have been influenced by a history effect- unplanned events that occur between Time 1 and Time 2 measurements (Christensen, Johnson, & Turner, 2014). The marriage equality plebiscite in Australia, which was not pre-empted during the design phase of the current study, may have impacted on the emotional disclosures made by participants, possibly attenuating the utility of the predictor variables examined.

Implications of the Current Research

The most important predictor of participant's intentions was subjective norms. Past research have identified that Facebook's most prominent social norm, the positivity bias, has important consequences for the wellbeing of Facebook users. Most pointedly, the effects of the positivity bias have disproportionate consequences for Facebook users with low levels of subjective wellbeing than for users with high levels (Forest & Wood, 2012; Reinecke & Trepte, 2014). According to Reinecke and Trepte (2014) individuals experience increased psychological wellbeing from having their "authentic self" realised and validated by others. Being ones' authentic self involves expressing the qualities that are important to one's sense of identity (Grieve & Watkinson, 2016). Grieve and Watkinson (2016) found that better psychological wellbeing was experienced when individuals expressed authenticity on the Facebook platform. However, the current data highlights that the positivity bias on Facebook may (for some individuals) cause undue pressure to engage in unhealthy self-presentation.

A series of studies by Forest and Wood (2012) examined the effect of the positivity bias in participants with high and low levels of self-esteem. Facebook

users low in self-esteem were found to express more negativity and less positivity in their status updates. Building on these findings, Forest and Wood (2012) sought to determine how participants' actual friends responded to the content of their status updates. Status updates from participants were coded for valence (positive or negative) and the number of likes and comments on each status update was recorded. Results showed that when individuals with high self-esteem expressed negativity they received more support from their friend-network but individuals with low self-esteem received more support when they expressed positivity, possibly to encourage the positive disclosure behaviour. The findings from Forest and Wood's (2012) study showed that Facebook users could obtain social support from expressing negative self-disclosures in status updates but when they express negativity constantly and indiscriminately the positivity bias impacts their access to social support (Forest & Wood, 2012). The current study meaningfully contributes to these findings. This was the first study to employ the TPB to predict intentions to post positive or negative content in Facebook status updates. The current findings confirm that social pressure is pervasive and extend to behaviour in the online environment. The TPB in the current study can identify Facebook user's intentions to post negative content in their Facebook status updates and can therefore be used to identify Facebook users who may benefit from further social support. This is important because the Facebook positivity bias has been shown to restrict access to social support for Facebook users who express large amounts of negativity on Facebook.

Increasing online connectivity in the modern world highlights the need to test classic behaviour theories in online social environments. By investigating a

novel behaviour, this study adds to evidence for the utility of the TPB in predicting intentions in the online context.

Conclusion

The TPB model in the current research effectively predicted intentions to post positively and negatively valenced content in status updates. Facebook users' intentions to post negatively valenced content also anticipated actual posting of negatively valenced content. The current findings also emphasise the role of subjective norms as a major predictor of online social behaviours. Results of the current study, together with extant research identifying the impact of social norms on Facebook promoting positive emotional disclosures (e.g. reference), contribute to our understandings of the variables that predict social behaviour on the social networking platform Facebook.

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Appendix A1

Demographic Questionnaire

What is your sex? (Female, Male, Other)

What is your age? (18 – 91 or older)

Appendix A2

Facebook Intensity Scale (Ellison, Steinfield & Lampe, 2007)

"Please read each of the following statements and decide how much you agree or disagree with that statement," where *5=strongly agree, 4=agree, 3=neutral (neither agree nor disagree), 2 =disagree, 1=strongly disagree.*

1. Facebook is part of my everyday activity.
2. I am proud to tell people I'm on Facebook
3. Facebook has become part of my daily routine.
4. I feel out of touch when I haven't logged onto Facebook for a while.
5. I feel I am part of the Facebook community.
6. I would be sorry if Facebook shut down.

7. How many total Facebook friends do you have?

Scoring: *0 = 10 or less, 1 = 11-50, 2 = 51-100, 3 = 101-150, 4 = 151-200, 5 = 201-250, 6 = 251-300, 7 = 301-400, 8 = more than 400.*

8. In the past week, on average, approximately how many minutes per day have you spent on Facebook?

Scoring: *0 = less than 10, 1 = 10-30, 2 = 31-60, 3 = 1-2 hours, 4 = 2-3 hours, 5 = more than 3 hours.*

Appendix A3

TPB Attitude Subscale

"Please read each of the following statements and indicate your response using the following scales."

1. For me to post a status update that contains positive emotions would be

harmful	1_____2_____3_____4_____5_____6_____7	beneficial
unpleasant	1_____2_____3_____4_____5_____6_____7	pleasant
bad	1_____2_____3_____4_____5_____6_____7	good
worthless	1_____2_____3_____4_____5_____6_____7	valuable

2. For me to post a status update that contains negative emotions would be

harmful	1_____2_____3_____4_____5_____6_____7	beneficial
unpleasant	1_____2_____3_____4_____5_____6_____7	pleasant
bad	1_____2_____3_____4_____5_____6_____7	good
worthless	1_____2_____3_____4_____5_____6_____7	valuable

Appendix A4

TPB Subscales

Subjective Norms Subscale

"Please read each of the following statements and decide how much you agree or disagree with that statement," where *7 = strongly agree, 6 = agree, 5 = slightly agree, 4 neutral (neither agree nor disagree), 3 = slightly disagree, 2 = disagree, 1 = strongly disagree.*

1. The people in my life whose opinions I value think that I should post status updates containing negative emotions on Facebook.
2. The people in my life whose opinions I value think that I should post status updates containing positive emotions on Facebook.
3. Most people who are important to me post status updates on Facebook that contain negative emotions.
4. Most people who are important to me post status updates on Facebook that contain positive emotions.
5. It is expected of me that I post status updates on Facebook that contain negative emotions.
6. It is expected of me that I post status updates on Facebook that contain positive emotions.

Perceived Behavioural Control Subscale

1. I have complete control over whether I post a status update containing positive emotion on Facebook.

2. I have complete control over whether I post a status update containing negative emotion on Facebook.
3. It would be easy for me to post a status update containing positive emotion on Facebook.
4. It would be easy for me to post a status update containing negative emotion on Facebook.
5. If I wanted to I could post a status update containing negative emotion on Facebook.
6. If I wanted to I could post a status update containing positive emotion on Facebook.

Intention Subscale

1. I intend to post a status update containing negative emotion within the next three weeks.
2. I intend to post a status update containing positive emotion within the next three weeks.
3. I will post a status update containing positive emotion within the next three weeks.
4. I will post a status update containing negative emotion within the next three weeks.
5. How likely is it that you will post a status update containing negative emotion within the next three weeks?
6. How likely is it that you will post a status update containing positive emotion within the next three weeks?

Appendix A5

HEXACO-60 Extraversion and Emotionality Subscales (Ashton & Lee, 2009).

"Please read each of the following statements and decide how much you agree or disagree with that statement," where *5 = strongly agree 4 = agree 3 = neutral (neither agree nor disagree) 2 = disagree 1 = strongly disagree.*

1. I feel reasonably satisfied with myself overall
2. I would feel afraid if I had to travel in bad weather conditions
3. I rarely express my opinions in group meetings*
4. I sometimes can't help worrying about little things
5. I prefer jobs that involve active social interaction to those that involve working alone
6. When I suffer from a painful experience, I need someone to make me feel comfortable
7. On most days, I feel cheerful and optimistic
8. I feel like crying when I see other people crying
9. I feel that I am an unpopular person*
10. When it comes to physical danger, I am very fearful
11. In social situations, I'm usually the one who makes the first move
12. I worry a lot less than most people do*
13. The first thing that I always do in a new place is to make friends
14. I can handle difficult situations without needing emotional support from anyone else*

15. Most people are more upbeat and dynamic than I generally am*
16. I feel strong emotions when someone close to me is going away for a long time
17. I sometimes feel that I am a worthless person*
18. Even in an emergency I wouldn't feel like panicking*
19. When I'm in a group of people, I'm often the one who speaks on behalf of the group
20. I remain unemotional even in situations where most people get very sentimental*

Appendix A6

Rosenberg Self-Esteem Scale (Rosenberg, 1979)

"Please read each of the following statements and decide how much you agree or disagree with that statement," where *4 = strongly agree 3 = agree, 2 = disagree, 1 = strongly disagree.*

1. On the whole, I am satisfied with myself
2. At times I think I am no good at all*
3. I feel that I have a number of good qualities
4. I am able to do things as well as most other people
5. I feel I do not have much to be proud of*
6. I certainly feel useless at times*
7. I feel that I'm a person of worth

8. I wish I could have more respect for myself*
9. All in all, I am inclined to think that I am a failure*
10. I take a positive attitude towards myself

Appendix A7

Interpersonal Orientation Scale (Hill, 1987)

"Please read the following statements and rate them based on how true each statement is of you," where *5 = not at all true, 4 = slightly true, 3 = somewhat true, 2 = mostly true, 1 = completely true.*

1. One of my greatest sources of comfort when things get rough is being with other people.
2. I prefer to participate in activities alongside other people rather than by myself because I like to see how I am doing on the activity.
3. The main thing I like about being around other people is the warm glow I get from contact with them.
4. It seems like whenever something bad or disturbing happens to me I often just want to be with a close, reliable friend.
5. I mainly like people who seem strongly drawn to me and who seem infatuated with me.
6. I think I get satisfaction out of contact with others more than most people realise.
7. When I am not certain about how well I am doing at something, I usually like to be around others so I can compare myself to them.
8. I like to be around people when I can be the centre of attention.

9. When I have not done very well on something that is very important to me, I can get to feeling better simply by being around other people.
10. Just being around others and finding out about them is one of the most interesting things I can think of doing.
11. I seem to get satisfaction from being with others more than a lot of other people do.
12. If I am uncertain about what is expected of me, such as on a task or in a social situation, I usually like to be able to look to certain others for cues.
13. I feel like I have really accomplished something valuable when I am able to get close to someone.
14. I find that I often have the desire to be around other people who are experiencing the same thing I am when I am unsure of what is going on.
15. During times when I have to go through something painful, I usually find that having someone with me makes it less painful.
16. I often have a strong need to be around people who are impressed with what I am like and what I do.
17. If I feel unhappy or kind of depressed, I usually try to be around other people to make me feel better.
18. I find that I often look to certain other people to see how I compare to others.
19. I mainly like to be around others who think I am an important, exciting person.
20. I think it would be satisfying if I could have very close friendships with quite a few people.
21. I often have a strong desire to get people I am around to notice me and appreciate what I am like.

22. I don't like being with people who may give me less than positive feedback about myself.
23. I usually have the greatest need to have other people around me when I feel upset about something.
24. I think being close to others, listening to them, and relating to them on a one-to-one level is one of my favourite and most satisfying pastimes.
25. I would find it very satisfying to be able to form new friendships with whomever I liked.
26. One of the most enjoyable things I can think of that I like to do is just watching people and seeing what they are like.

Scoring: Higher scores indicate higher motivation to affiliate with others. Scale broken into four subscales:

Emotional support Items: 1, 4, 9, 15, 17, 23

Attention Items: 5, 8, 16, 19, 21, 22

Positive stimulation Items: 3, 6, 10, 11, 13, 20, 24, 25, 26

Social comparison Items: 2, 7, 12, 14, 18

Appendix A8

Social Desirability Scale (Reynolds, 1982)

"Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally."

1. It is sometimes hard for me to go on with my work if I am not encouraged.

2. I sometimes feel resentful when I don't get my way
3. On a few occasions, I have given up doing something because I thought too little of my ability.
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
5. No matter who I'm talking to, I'm always a good listener.
6. There have been occasions when I took advantage of someone.
7. I'm always willing to admit it when I make a mistake.
8. I sometimes try to get even rather than forgive and forget
9. I am always courteous, even to people who are disagreeable.
10. I have never been irked when people expressed ideas very different from my own.
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favors of me.
13. I have never deliberately said something that hurt someone’s feelings.

Appendix B

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HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK

UTAS

01 August 2017

Dr Rachel Grieve
Division of Psychology
University of Tasmania

Student Researcher: Emma Brown

Sent via email

Dear Dr Grieve

Re: MINIMAL RISK ETHICS APPLICATION APPROVAL
Ethics Ref: **H0016679 - Facebook Status Update Study**

We are pleased to advise that acting on a mandate from the Tasmania Social Sciences HREC, the Chair of the committee considered and approved the above project on 10 July 2017.

This approval constitutes ethical clearance by the Tasmania Social Sciences Human Research Ethics Committee. The decision and authority to commence the associated research may be dependent on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or review by your research governance coordinator or Head of Department. It is your responsibility to find out if the approval of other bodies or authorities is required. It is recommended that the proposed research should not commence until you have satisfied these requirements.

Please note that this approval is for four years and is conditional upon receipt of an annual Progress Report. Ethics approval for this project will lapse if a Progress Report is not submitted.

The following conditions apply to this approval. Failure to abide by these conditions may result in suspension or discontinuation of approval.

1. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval, to ensure the project is conducted as approved by the Ethics Committee, and to notify the Committee if any investigators are added to, or cease involvement with, the project.

2. Complaints: If any complaints are received or ethical issues arise during the course of the project, investigators should advise the Executive Officer of the Ethics Committee on 03 6226 7479 or human.ethics@utas.edu.au.

3. Incidents or adverse effects: Investigators should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. Amendments to Project: Modifications to the project must not proceed until approval is obtained from the Ethics Committee. Please submit an Amendment Form (available on our website) to notify the Ethics Committee of the proposed modifications.

5. Annual Report: Continued approval for this project is dependent on the submission of a Progress Report by the anniversary date of your approval. You will be sent a courtesy reminder closer to this date. **Failure to submit a Progress Report will mean that ethics approval for this project will lapse.**

6. Final Report: A Final Report and a copy of any published material arising from the project, either in full or abstract, must be provided at the end of the project.

Yours sincerely

Katherine Shaw
Executive Officer
Tasmania Social Sciences HREC

Appendix C

Participant Information letter and Consent (to be provided online).

1. Invitation

You are invited to participate in a study examining the factors that influence status update posting on Facebook. This study is being conducted as part of an Honours project by Emma Brown under the supervision of Dr Rachel Grieve in the School of Medicine (Psychology) at the University of Tasmania.

2. What is the purpose of this study?

Facebook is the most widely used social networking platform worldwide however little research has focused on the type of information that people include in their status updates. This is an important area of research because findings are mixed as to whether posting negative status updates on Facebook have favourable or unfavourable social outcomes for Facebook users. The purpose of this study is to see whether we can predict whether a person will post more positive or negative status updates based on a range of psychological factors.

3. Why have I been invited to participate?

For this experiment we are looking for participants aged 18 years and over who post regular status updates to Facebook (approximately once a week). Participation in this study is entirely voluntary and there will be no consequences for individuals who do not wish to participate.

4. What will I be asked to do?

Participation will take approximately 20-30 minutes of your time in total and will occur at two time points. If you decide to participate in this study you will first be asked to complete a short questionnaire that measures aspects of your personality, self-esteem and your need to belong. For example, you will be asked to indicate on a scale how much you agree with statements such as *"On most days, I feel cheerful and optimistic"* and *"On the whole, I am satisfied with myself"*.

After completing the questionnaire, you are invited to send a friend request from your Facebook account to the private researcher Facebook page called 'Facebook Status Update Study' which will be specifically created for this experiment. Please note that if you choose not to send a friend request to this page then it will be assumed that you no longer wish to participate in the study. If you do send a friend request to this page, then your request will be accepted at some point over the following three-months.

When your friend request is accepted we will be able to view your page for a limited period of 24 hours and your past status updates will be recorded. You will then be unfriended by the researcher Facebook page and your participation in the study will be complete. Only one participant will be friended at a time so that participants will not be able to view the names of others taking part in this study. When we match your questionnaire responses to your status updates all data will be de-identified and no information will link it to you.

5. Are there any possible benefits from participation in this study?
First year Psychology students studying at the University of Tasmania will be eligible to receive 30 minutes of research participation credit for their participation via SONA. Participants from the general public (and any students who choose not to receive research credit) will have the chance to win one of four $50 gift vouchers (please note: at the end of the study you will be asked to follow a separate secure link to provide your details to receive research credit, or to go into the draw to win the gift voucher).

6. Are there any possible risks from participation in this study?
Participation in this study is not completely anonymous however when all data is collected it will be de-identified and will not contain any of your personal information. There are no known physical, psychological or economic risks associated with participation in this study however if UTAS students participating in the study would like to access counselling services, they can do so by following this link: http://www.utas.edu.au/students/counselling/personal-counselling. Participants from the general public should contact their GP or call Lifeline on (03) 6231 1882.

7. What if I change my mind during or after the study?
You are free to withdraw from this study at any time and without providing an explanation.

8. What will happen to the information from this study?
All data will be collected using a secure online service. Once the data is transferred for analysis, it will be stored on a password-protected server in the UTas Psychology Division. Research data will be de-identified and kept for at least 5 years after publication. Following this, data will be deleted.

9. What will happen to the results of this study?
Relevant findings from this study will be reported in an Honours thesis, and may also be reported in an academic journal, or at an academic conference. Participant information will be kept anonymous in any publication of the findings.

10. What if I have questions about this study?
For further information please contact Emma Brown (browneg@utas.edu.au) or Dr Rachel Grieve (rachel.grieve@utas.edu.au).
This study has been approved by the Tasmanian Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, please contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. Please quote ethics reference number H0016679.

Thank you for considering participation in this study.
If you have read and understood all of the above information and you consent to take part in this study please click ‘Yes’.
If you do not consent to taking part in this study please click ‘No’ and you will be exited from the questionnaire.